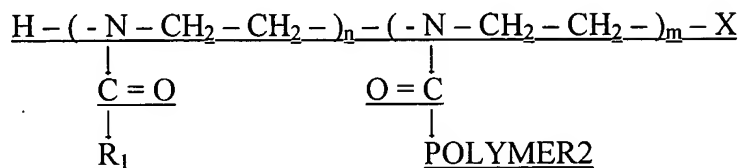


Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

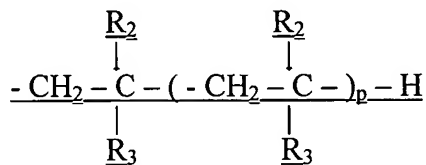
Listing of Claims:

1. Canceled.
2. Canceled.
3. (currently amended) A polymeric material having the structure



wherein R₁ is selected from the group consisting of hydrogen, methyl, ethyl, and propyl,

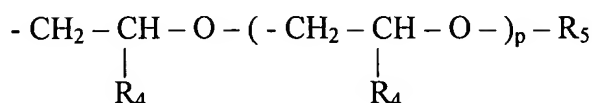
X is selected from the group consisting of acetate, p-tosylate, halide, sulfate, triflate, and mixtures thereof, and POLYMER2 is a water-insoluble polymeric material having a number average molecular weight in excess of 5,000, wherein POLYMER2 has the structure



wherein R₂ is selected from the group consisting of hydrogen, methyl, and mixtures thereof, and R₃ is selected from the group consisting of hydrogen, methyl, ethenyl, isopropenyl, carbomethoxy, phenyl, and mixtures thereof,

~~3. (original) The composition of claim 2,~~ wherein n is between about 50 to about 10,000, m is adjusted such that m/(n + m) is between about 0.0001 to about 0.20, and p is between about 60 to about 1250.

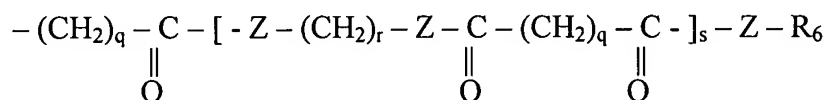
4. (withdrawn) The composition of claim 1, wherein POLYMER2 has the structure



wherein R₄ is selected from the group consisting of hydrogen, methyl, and mixtures thereof, and R₅ is hydrogen or alkyl.

5. (withdrawn) The composition of claim 4, wherein n is between about 50 to about 10,000, m is adjusted such that m/(n + m) is between about 0.0001 to about 0.20, p is between about 60 to about 1250.

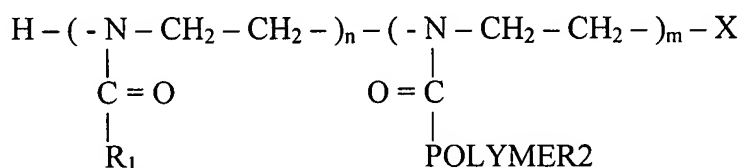
6. (withdrawn) The composition of claim 1, wherein POLYMER 2 has the structure



wherein Z is selected from the group consisting of O, NH, and mixtures thereof, and R₆ is selected from the group consisting of methyl, ethyl, propyl, and butyl.

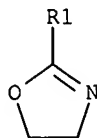
7. (withdrawn) The composition of claim 6, wherein n is between about 50 to about 10,000, m is adjusted such that m/(n + m) is between about 0.0001 to about 0.20, q is between 4 to about 12, r is between 4 to about 12, s is between about 25 to about 450

8. (withdrawn) A method to form a polymeric composition having the structure



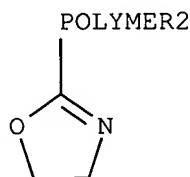
wherein R₁ is selected from the group consisting of hydrogen, methyl, ethyl, and propyl, X is selected from the group consisting of acetate, p-tosylate, halide, sulfate, triflate, and mixtures thereof, and POLYMER2 is a non-water soluble polymeric material having a number average molecular weight of 5,000 or greater; comprising the steps of:

supplying a first monomer having the structure



wherein R1 is selected from the group consisting of hydrogen, methyl, ethyl, and propyl;

supplying a second monomer having the structure



wherein POLYMER2 is a non-water soluble polymeric material having a number average molecular weight of 5,000 or greater;

mixing said second monomer with said first monomer;

adding a cationic polymerization catalyst R'X to said monomer mixture to form a reaction mixture, wherein X is selected from the group consisting of acetate, p-tosylate, halide, sulfate, triflate, and mixtures thereof, and wherein R' is selected from the group consisting of hydrogen, alkyl, or aralkyl;

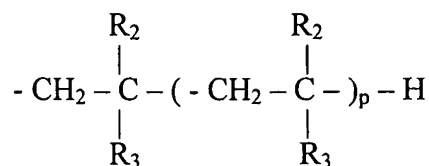
stirring said reaction mixture; and

heating said reaction mixture at a temperature of between about 7 °C to about 180 °C to form said polymeric composition.

9. (withdrawn) The method of claim 8, wherein said heating step is performed in a solvent.

10. (withdrawn) The method of claim 9, wherein said solvent is selected from the group consisting of orthodichlorobenzene, ethyl benzene, cumene, xylene, decane, 2-ethyl hexyl acetate, naphthalene, octane, and mixtures thereof.

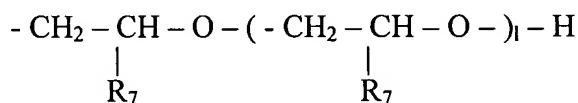
11. (withdrawn) The method of claim 8, wherein POLYMER2 has the structure



wherein R₂ is selected from the group consisting of hydrogen, methyl, and mixtures thereof, and R₃ is selected from the group consisting of hydrogen, methyl, carbomethoxy, ethenyl, isopropenyl, phenyl, and mixtures thereof.

12. (withdrawn) The method of claim 11, wherein n is between about 50 to about 10,000, m is adjusted such that m/(n + m) is between about 0.0001 to about 0.20, and p is between about 60 to about 1250.

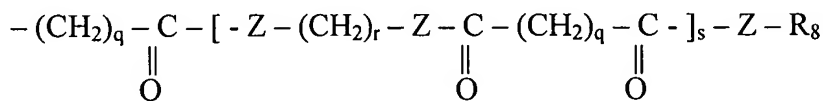
13. (withdrawn) The method of claim 8, wherein POLYMER2 has the structure



wherein R₇ is selected from the group consisting of hydrogen, methyl, and mixtures thereof

14. (withdrawn) The method of claim 13, wherein n is between about 50 to about 10,000, m is adjusted such that m/(n + m) is between about 0.0001 to about 0.20, l is between about 60 to about 1250.

15. (withdrawn) The method of claim 8, wherein POLYMER2 has the structure

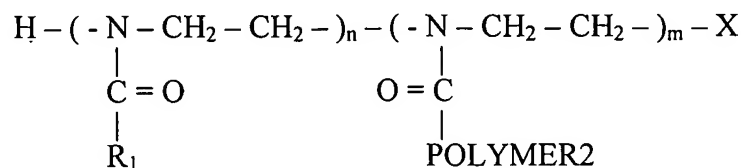


wherein Z is selected from the group consisting of O, NH, and mixtures thereof, and R₈ is selected from the group consisting of methyl, ethyl, propyl, and butyl.

16. (withdrawn) The method of claim 15, wherein n is between about 50 to about

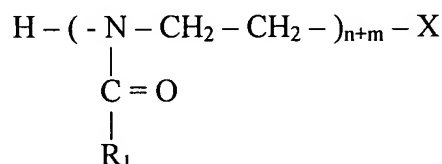
10,000, m is adjusted such that $m/(n + m)$ is between about 0.0001 to about 0.20, q is between 4 to about 12, r is between 4 to about 12, s is between about 25 to about 450.

17. (withdrawn) A method to form a polymeric composition having the structure



wherein R_1 is selected from the group consisting of hydrogen, methyl, ethyl, and propyl, X is selected from the group consisting of acetate, p-tosylate, halide, sulfate, triflate, and mixtures thereof, and POLYMER2 is a water-insoluble polymeric material having a number average molecular weight of 5,000 or greater; comprising the steps of:

supplying a first polymer having the structure



wherein R_1 is selected from the group consisting of hydrogen, methyl, ethyl, and propyl, and X is selected from the group consisting of acetate, p-tosylate, halide, sulfate, triflate, and mixtures thereof;

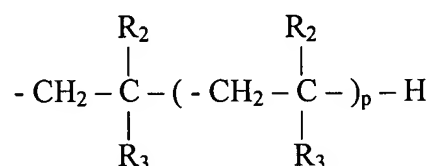
supplying a second polymer having the structure



wherein POLYMER2 is a non water soluble polymeric material having a number average molecular weight of 5,000 or greater, and Y is selected from the group consisting of OH, Cl, O^- , Na^+ , O^-K^+ , and O^-Li^+ ;

mixing said second polymer with said first polymer to form a reaction mixture;
 stirring said reaction mixture; and
 heating said reaction mixture while removing R₁-COOH as it forms, to form said polymeric composition.

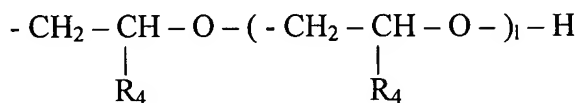
18. (withdrawn) The method of claim 17, wherein POLYMER2 has the structure



wherein R₂ is selected from the group consisting of hydrogen, methyl, and mixtures thereof, and R₃ is selected from the group consisting of hydrogen, methyl, ethenyl, isopropenyl, carbomethoxy, phenyl, and mixtures thereof.

19. (withdrawn) The method of claim 18, wherein n is between about 50 to about 10,000, m is adjusted such that m/(n + m) is between about 0.0001 to about 0.20, and p is between about 60 to about 1250.

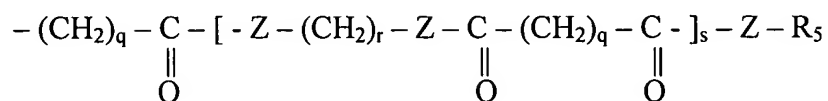
20. (withdrawn) The method of claim 17, wherein POLYMER2 has the structure



wherein R₄ is selected from the group consisting of hydrogen, methyl, and mixtures thereof.

21. (withdrawn) The method of claim 20, wherein n is between about 50 to about 10,000, m is adjusted such that m/(n + m) is between about 0.0001 to about 0.20, l is between about 60 to about 1250.

22. (withdrawn) The method of claim 17, wherein POLYMER2 has the structure



wherein Z is selected from the group consisting of O, NH, and mixtures thereof, and R₅ is selected from the group consisting of methyl, ethyl, propyl, and butyl.

23. (withdrawn) The method of claim 22, wherein n is between about 50 to about 10,000, m is adjusted such that m/(n + m) is between about 0.0001 to about 0.20, q is between 4 to about 12, r is between 4 to about 12, s is between about 25 to about 450.